

Work Order ID 126351

126351

Page 1

Wednesday, November 05, 2014 7:46:35 AM

Item ID: D3186-4 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Spacepod Door, RH
 Start Date: 11/5/2014 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 11/5/2014 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: 11-11-05 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3186	Rev E								

100 0.00
100 Small Fab 25 15-03-10
 Small Fab Memo 0.00
 Small Fab 1-Trim door to fit spacepod before drill holes and cut out slots for latch as per
 dwg D3186 (D3186-4 detail)

110 0.00
110 QC5- Inspect part completeness to step on W/O 1 25-03-10
 QC Memo 0.00
 Quality Control

120 0.00
120 Identify as per dwg & Stock Location: CA2
 Packaging Memo 0.00
 Packaging 25 15-03-10

DAS
38
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐															
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Large Fab ☐	Composite ☐	Supplier ☐																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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126351

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Item ID: D3186-4

Accept

N900040100

Setup Start *NS1*

Revision ID:

Item Name: Spacepod Door, RH

Stop *NS2*

Start Date: 11/5/2014 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 11/5/2014 **Req'd Qty:** 1.00 ***1***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/
Work Center ID

Operation Description

Set Up/ Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.00

Quality Control

45-3-10

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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Picklist Print

Wednesday, November 05, 2014 7:46:40 AM

Page 1

Work Order ID: 126351

126351

Parent Item: D3186-4

D3186-4

Parent Item Name: Spacepod Door, RH

Start Date: 11/5/2014

Required Date: 11/5/2014

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev:A New Issue 07-01-11 EC

IPP rev.B revD 07.03.07 ec

10-08-11 added trim door before drilling DD verf:EC

IPP Rev:C

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3186-2M	2M	Manufactured	No			100	Each	1.0000	1	1			
D3186-2M						126354			**			15-03-09	
Spacepod Door RH	2M												
				<u>Location</u>		<u>Loc Qty</u>	<u>Loc Code</u>						
				CA		1							
				105749		1							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

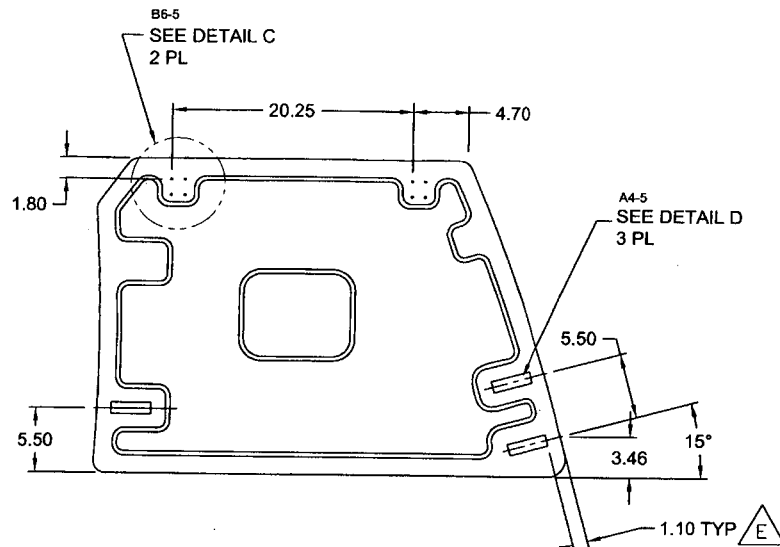
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube ☐</td> <td>Crosstube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐	
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Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

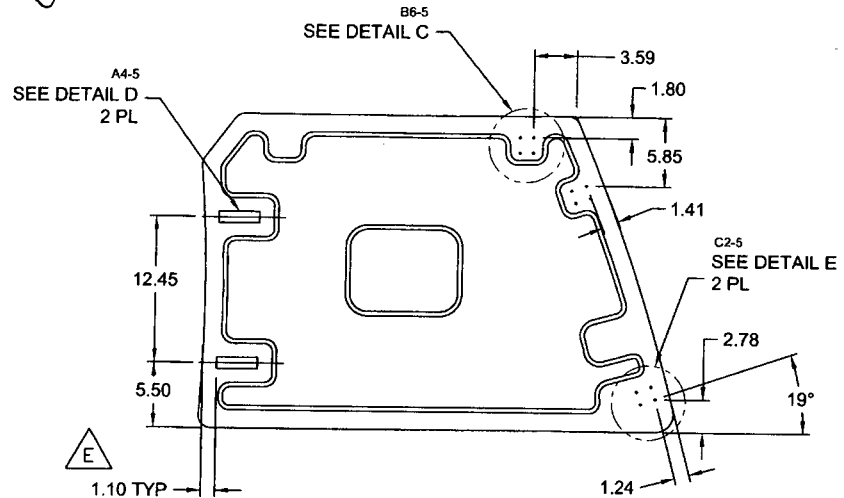
Landing Gear ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Inspection Strip in Tube ☐ Marks/Chatter ☐ Turning Sequence ☐ Wave/Twist in Tube	General ☐ Bend ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Burrs ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Drawing ☐ Drill Holes ☐ Finish ☐ Fit/Function	☐ Folio/Program ☐ Grain ☐ Hardware ☐ Inspection Incomplete/Unqualified ☐ Instructions Incomplete/Unclear ☐ Misaligned/off center ☐ Mislabeled ☐ Misread ☐ Off-set ☐ Out of Calibration ☐ Out of Sequence	☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Positioned Wrong ☐ Power Loss/Surge ☐ Pressure/Forced ☐ Set-up ☐ Temperature/Cure ☐ Weld ☐ Wrong Stock Pulled ☐ Other
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W/O 126351



D3186-1 SPACEPOD DOOR, LH
MAKE FROM D3186-1M

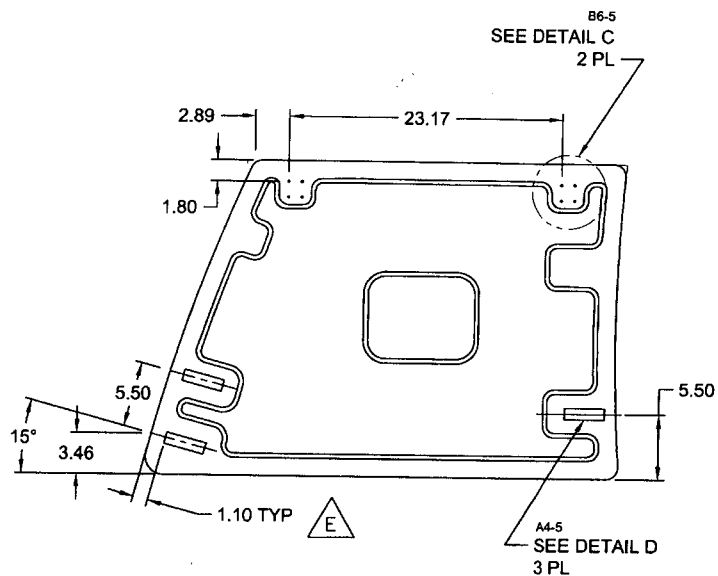
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: N/A



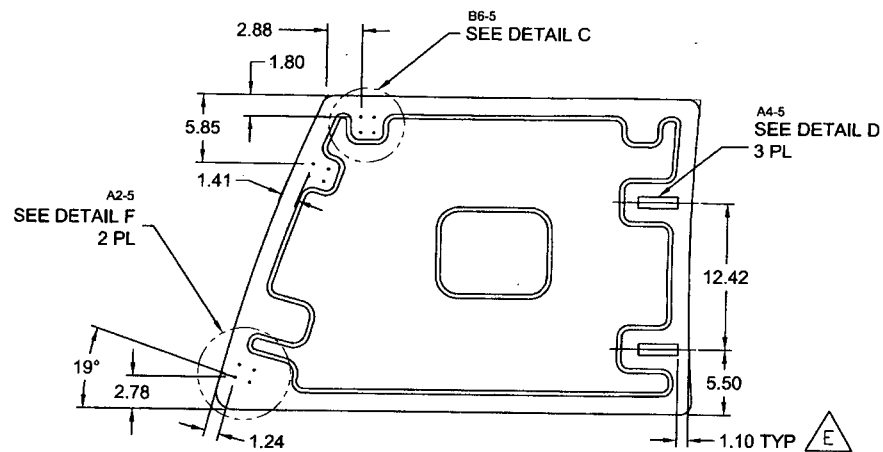
D3186-3 SPACEPOD DOOR, LH
MAKE FROM D3186-1M

RELEASED
2009-09-09

REV.	DESCRIPTION	BY	DATE
E	DRAWING UPDATED TO CURRENT STANDARDS. 1.10 WAS 0.98 (ZN B5-1, B4-1, B7-2, B1-2); R0.12 WAS 0.125 (ZN B5-5); REF PAR 09-026	RF	09.07.08
D	UPDATE DIMENSIONS	LE	07.02.22
C	REMOVED D0600-XXX LABELS	LE	06.12.13
B	DIMS UPDATED TO MATCH PRODUCT FOAM PATTERN. UPDATED D3186-1M/2M/3/4 ADDED	LE	06.09.25
A	NEW ISSUE	CP	03.03.27
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	RF	DRAWING NO.	REV. E
MFG. APPR.	RF	D3186	SHEET 1 OF 5
APPROVED	RF	TITLE	SCALE
DE APPR.	RF	SPACEPOD DOOR	NTS
DATE	09.07.08	COPYRIGHT © 2003 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D3186-2 SPACEPOD DOOR, RH
MAKE FROM D3186-2M



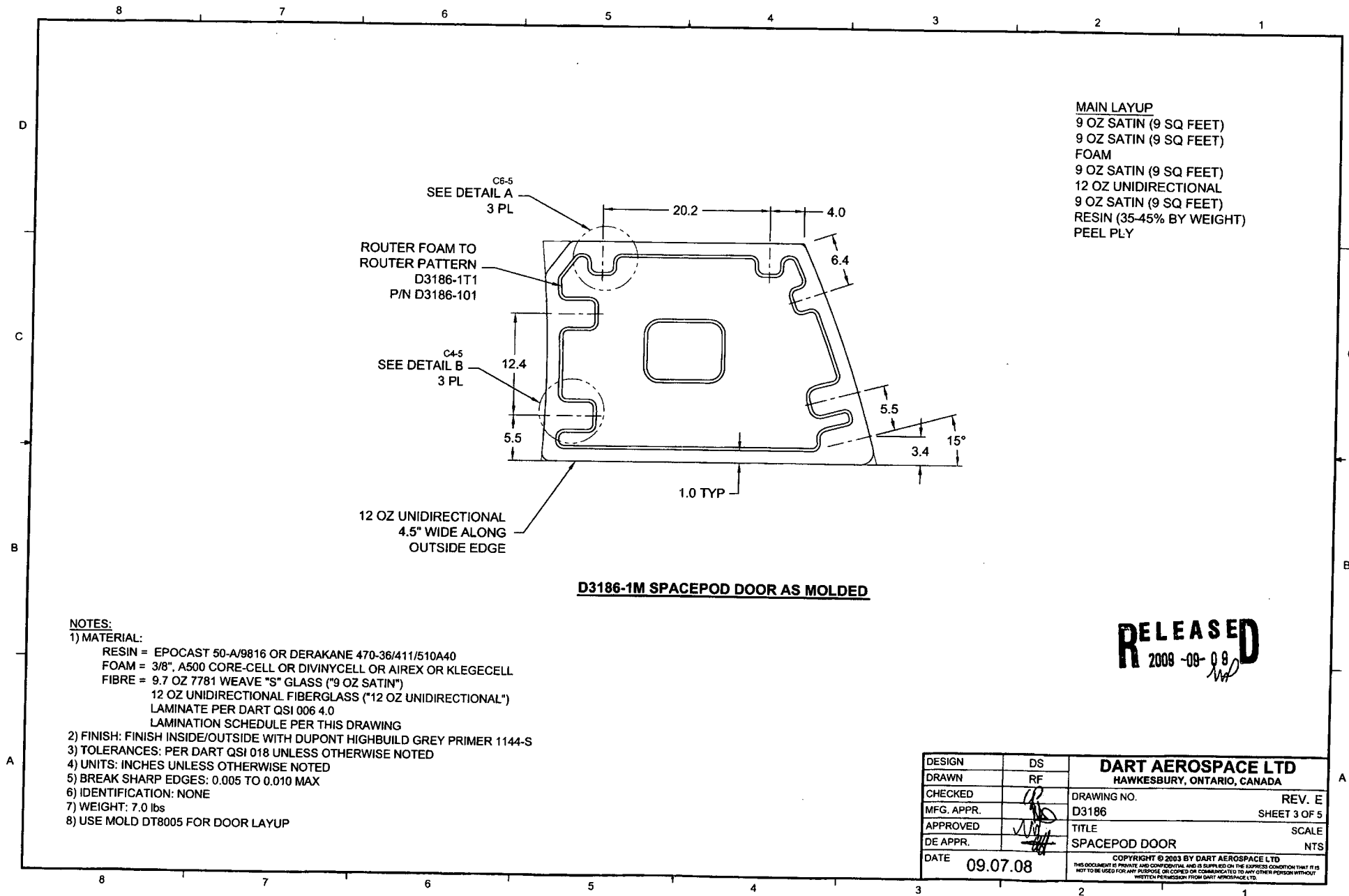
D3186-4 SPACEPOD DOOR, RH
MAKE FROM D3186-2M

RELEASED
2008-09-09

NOTES:

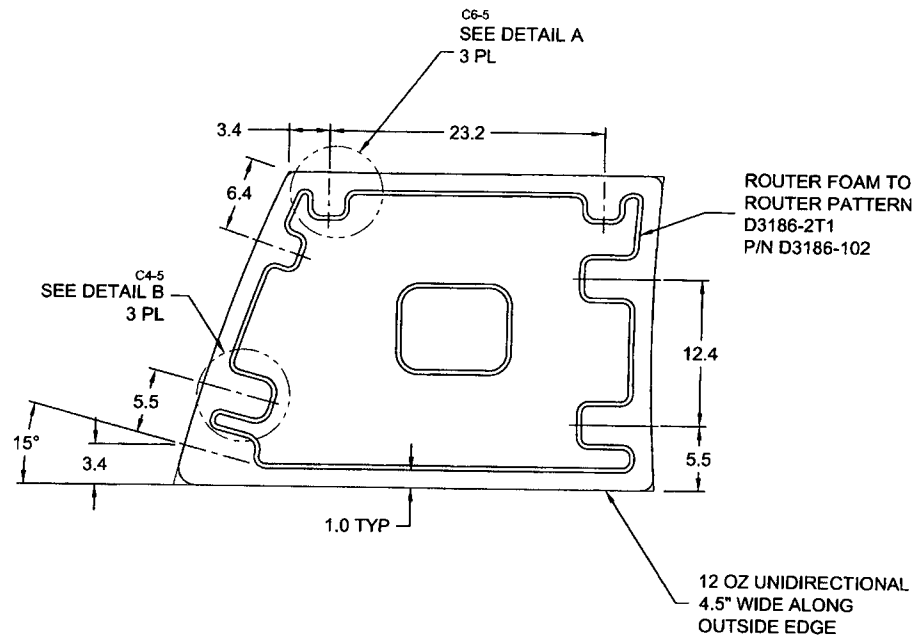
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- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: N/A

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 2 OF 5
APPROVED		TITLE	SCALE
DE APPR.		SPACEPOD DOOR	NTS
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MAIN LAYUP

9 OZ SATIN (9 SQ FEET)
 9 OZ SATIN (9 SQ FEET)
 FOAM
 9 OZ SATIN (9 SQ FEET)
 12 OZ UNIDIRECTIONAL
 9 OZ SATIN (9 SQ FEET)
 RESIN (35-45% BY WEIGHT)
 PEEL PLY



NOTES:

1) MATERIAL:

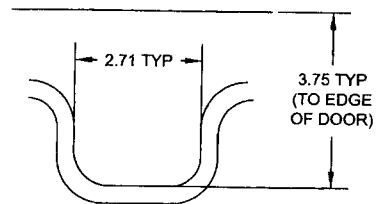
RESIN = EPOCAST 50-A/9816 OR DERAKANE 470-36/411/510A40
 FOAM = 3/8", A500 CORE-CELL OR DIVINYCELL OR AIREX OR KLEGECELL
 FIBRE = 9.7 OZ 7781 WEAVE "S" GLASS ("9 OZ SATIN")
 12 OZ UNIDIRECTIONAL FIBERGLASS ("12 OZ UNIDIRECTIONAL")
 LAMINATE PER DART QSI 006 4.0
 LAMINATION SCHEDULE PER THIS DRAWING

- 2) FINISH: FINISH INSIDE/OUTSIDE WITH DUPONT HIGHBUILD GREY PRIMER 1144-S
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 7.0 lbs
- 8) USE MOLD DT8006 FOR DOOR LAYUP

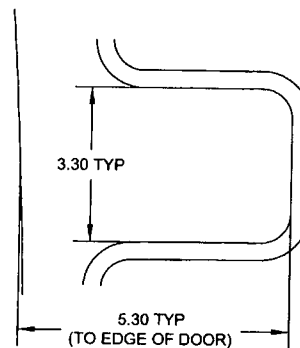
D3186-2M SPACEPOD DOOR AS MOLDED

RELEASED
 2009-08-09
MP

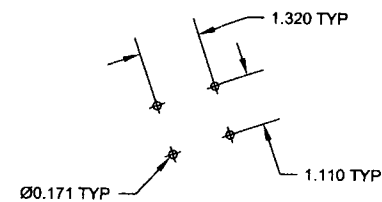
DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	<i>RF</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>MP</i>	D3186	SHEET 4 OF 5
APPROVED	<i>MP</i>	TITLE	SCALE
DE APPR.	<i>MP</i>	SPACEPOD DOOR	NTS
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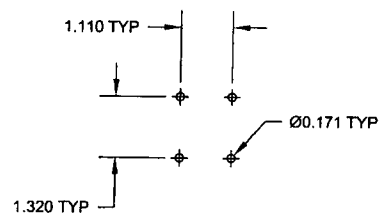
DETAIL A
SCALE 4X
D6-3
D4-4



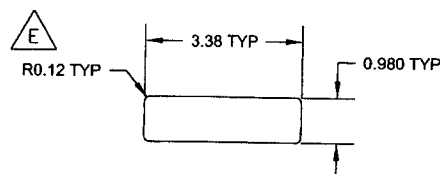
DETAIL B
SCALE 4X
C6-3
C6-4



DETAIL E
SCALE 4X
C1-1

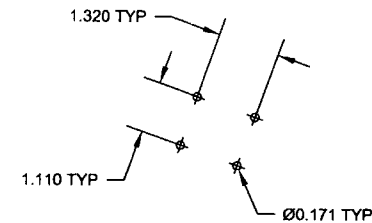


DETAIL C
SCALE 4X
D7-1
D3-1
D6-2
D3-2



DETAIL D
SCALE 4X
C5-1
D4-1
B6-2
C2-2

NOTE: ENSURE THAT CUTOUT IS
PERPENDICULAR TO EDGE OF DOOR



DETAIL F
SCALE 4X
C4-2

RELEASED
2009-09-08

DESIGN	DS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D3186	SHEET 5 OF 5
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